

REMARKS

This paper is in response to the Office action dated September 28, 2006, in which (i) the specification was objected to for a formality, and (ii) claims 1-10 were rejected as either anticipated by, or unpatentable over, one or more of Tokuda et al. U.S. Patent No. 6,035,213 (“Tokuda”) and Rakib et al. U.S. Patent No. 6,426,983 (“Rakib”).

I. Status of Claims

Claims 1-10 and 17-20 are pending and at issue, and claims 11-16 have been withdrawn from consideration. Claims 17-20 have been indicated as allowable in substance, for which the applicants express their appreciation.

II. Summary of Amendments

The specification has been amended to update a cross-reference to a related application, as requested in the action. No new matter has been added, and reconsideration and withdrawal of the objection to the specification are respectfully requested.

Independent claims 1 and 6 have been amended to clarify that determining if a notch module is operating properly involves testing for a failure condition (claim 1) or is based on a failure condition test (claim 6). No new matter has been added by these amendments, as support can be found in the application as originally filed at, for example, Figs. 10 and 15, and at page 18, lines 3-6, and page 26, lines 3-13.

Claims 17 and 19 have been rewritten in independent form to include all of the limitations of a base claim. Accordingly, no new matter has been added, and an indication of allowability is respectfully requested.

III. Responses to Claim Rejections

The applicants respectfully traverse the rejection of claims 1-10 under 35 U.S.C. §102(e) or 35 U.S.C. §102(e)/103(a) as being anticipated by, or unpatentable over, one or

more of Tokuda and Rakib. Reconsideration and withdrawal are respectfully requested for at least the following reasons.

As set forth in MPEP §2131, to anticipate a claim, the cited reference must teach every element of the claim.

As set forth in MPEP §2142, three basic criteria must be met to establish a prima facie case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all of the claim limitations.

A. The cited art fails to teach or suggest all of the claim limitations

With the foregoing amendments, claims 1-5 require determining if assigned filters are operating properly by testing for a failure condition, claims 6-10 require a controller adapted to determine if a notch module is operating properly based on a failure condition test.

The applicants respectfully submit that the cited art fails to teach or suggest either (i) determining if assigned filters are operating properly by testing for a failure condition, or (ii) a controller adapted to determine if a notch module is operating properly based on a failure condition test. In short, the cited art fails to disclose or suggest any failure condition test or testing.

In contrast, Tokuda teaches a telephone system that determines when to attenuate a CDMA signal. Tokuda is not directed to failure conditions, but rather that attenuation “may cause a problem” if a disturbing signal is absent (col. 9, lines 16-19). To avoid this, Tokuda utilizes a frequency detecting circuit 107 to observe the output level of the receiver and allow a notch filter to execute only when the output level exceeds a predetermined level (col. 9, lines 23-27). To the extent that Tokuda is performing any testing, the testing is directed to whether a disturbing signal is absent or present. Either way, however, Tokuda assumes that the notch filter is operating properly, and fails to teach or suggest the desirability of any further testing, let alone a failure condition test.

Rakib fails to cure this deficiency. Like Tokuda, Rakib discloses an approach to attenuation only in the presence of interference. Fig. 6 of Rakib illustrates the approach.

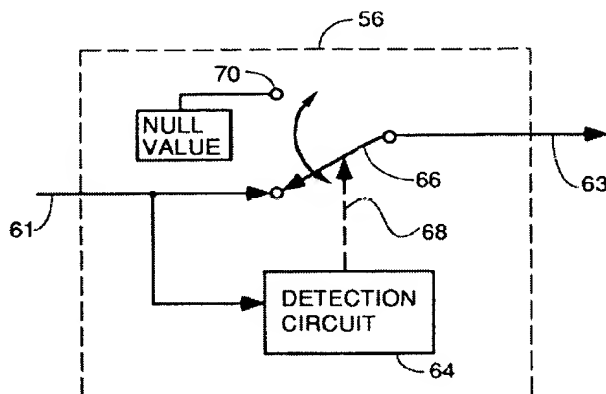


FIG. 6

The text accompanying Fig. 6 (col. 9, lines 38-61) confirms that Rakib is directed to whether interference is present rather than whether a filter is operating properly:

FIG. 6 is a diagram of one embodiment for the detection and cancellation circuits 56, 58 and 60 that comprise block 36 in FIG. 2. The narrowband samples arrive on bus 61 and are coupled to a detection circuit 64 that computes the average absolute amplitude or other criteria used or does an FFT on the samples from the bin. The detection circuit controls the position of a switch 66 via a control signal symbolized by dashed arrow 68. If the detection circuit detects no interference signal present, it leaves switch 66 in the position shown so the samples pass unattenuated through the circuit and are output on bus 63. If the detection circuit determines that an interference signal is present, signal 68 is altered to cause switch 66 to connect bus 63 to terminal 70 which is connected to a null value thereby completely eliminating the samples on bus 61 from the group of samples that will be converted by synthesis bank 40 back into a single signal represented by a single group of samples. An alternative embodiment for the cancellation portion of the detection and cancellation circuits would be a switching circuit which imposes an adaptable notch filter in the signal path when a narrowband interference source is found and sets the coefficients of the notch filter to substantially match the center frequency of the notch filter with the center frequency of the narrowband interference signal. In some

Based on the foregoing, the applicants respectfully submit that the cited art fails to disclose or suggest failure condition testing, as recited in claims 1 and 6. It follows that claims 1 and 6, and claims 2-5 and 7-10 by implication, are not anticipated by the cited art.

B. The requisite suggestion or motivation to modify the cited art is lacking

As described above, the cited art is concerned with whether attenuation should occur rather than whether filters are operating properly. Instead, both Tokuda and Rakib describe circumstances and techniques for disabling a filter. In so doing, both Tokuda and Rakib presume that the notch filters would otherwise operate to attenuate the incoming signal. Thus, the cited art does not recognize or address the need or desirability of any further testing, much less a failure condition test or testing, to determine if the assigned filters are operating properly.

For these reasons, the applicants respectfully submit that the requisite suggestion or motivation to modify the cited art to involve a failure condition test or testing is lacking. The applicants accordingly submit that a prima facie case of obviousness has not been established for claims 1 and 6. It follows that claims 1 and 6, and claims 2-5 and 7-10 by implication, recite patentable subject matter over the cited art.

IV. Conclusion

For the foregoing reasons, it is submitted that claims 1-10 and 17-20 are allowable over the cited art, and an indication to that effect is solicited. Should the examiner wish to discuss the foregoing or any matter of form in an effort to advance this application toward allowance, the examiner is urged to telephone the undersigned at the indicated number.

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Respectfully submitted,

By 

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